## START V TECHNICAL DIRECTION FORM

ACTIVITY: Removal Assessment
START DATE/COMPLETION DATE: 07/01/2021 / 06/30/2022

**TD #:** 68HE0221F0043/0011

TASK MONITOR: Daniel Gaughan

SITE CODE: A23P

CERCLIS CODE: NYD987001468

EPA SITE / PROJECT NAME: CANADIAN RADIUM & URANIUM CORP / Canadian

Radium Assessment

ADDRESS: MT. KISCO AVENUE

COUNTY / CITY / STATE: Westchester / MT. KISCO / NY

PRIORITY: High

SOURCE OF FUNDS: CERCLA - Removal

TRAVEL Required: Y

OVERTIME: N

## GENERAL SITE DESCRIPTION:

The site consists of a small area of radionuclide contamination. The area of observed contamination based on gamma screening is approximately 2,260.445 square feet. Based on previous investigations and soil sampling at the site, the residual contamination from former operations of the Canadian Radium and Uranium (CRU) facility is believed to be located throughout the 105 Kisco Avenue property. The site is bordered to the north by commercial properties; to the west by Kisco Avenue; to the south by Rail Road Avenue; and to the east by railroad tracks. The historic property is 2.72 acres and is currently occupied by a landscaping business (103 Kisco Ave.) and a stone, masonry, and landscaping business (105 Kisco Ave.). From 1943 until approximately 1966, the CRU facility operations included the recovery of uranium and other radioactive elements from uranium-bearing sludge, old instrumentation, and watch dials. This work began as part of the federal governments Manhattan Engineering District (Manhattan Project). From 1943 to the 1950s, the primary product was uranium; subsequently, radium became the principal product until the facilitys closure.

In November and December 1966, the facility buildings were decontaminated and demolished. Removal of radioactive dirt to a depth of 12 inches was required on the premises and after demolition and decontamination, a post-operation survey was conducted. Between 1964 (pre-demolition/decontamination) and 1971 (post-demolition/decontamination), the building layout of the site completely changed and it is believed that none of the original facility buildings remained after the year 1971.

On April 20, 1979, a survey was performed by the Westchester County Department of Health that reported high readings from an area covering approximately one square yard of the property in an area not used by the public. The report indicated that the dose rates found did not pose a public health hazard to the public. In 1994, EPA conducted an on-site inspection to measure radon levels, collect air and soil samples, and measure exposure rates. Elevated exposure rate measurements were observed on both the northern and southern portions of the site property, but radon measurements were below EPA's guideline and air samples collected at the site did not detect any suspension of radioactive contamination. EPA concluded that the site was not a potential candidate for inclusion in the National Priorities List and, therefore, was not eligible for long-term remediation. In July 1998, a complete radiological survey of the site was conducted by the NYSDEC. The property at 103 Kisco Avenue was found to have contamination over one large unpaved area and a few smaller areas and at the property

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at 105 Kisco Ave., indicated that radioactive materials were present under the parking lot. The report suggested that significant radium contamination was present on both the 103 and 105 Kisco Ave. properties, but they did not consider the site to be fully characterized at the completion of the survey.

Current site conditions are the site is semi-paved and completely fenced with an access gate. Many areas were unable to be screened due to obstructions and there were no elevated screening readings on the 103 Kisco Avenue property. Weston Solutions performed a complete gamma screening of the site on November 20-22, 2013 and significant readings were used to establish an area of observed contamination and soil samples were collected as part of the Site Reassessment sampling event for the site. Analytical results indicate concentrations of radionuclides found in the soil to be significantly higher than at background conditions. Air measurements were collected on November 25, 2013 and results indicated no elevated concentrations above background conditions. Sediment samples were collected on May 15, 2014 along the surface water pathway. Analytical data suggests that there is a release of site-attributable hazardous substances from the site.

## **DESCRIPTION OF WORK:**

This TD is a continuation of work assigned in TD 68HE0220F0036/0024.

In accordance with the Assessment Section in the SOW, Weston Solutions shall provide site assessment support and perform/complete the following activities:

- 1. Provide four team members to work with Site OSC in the planning and field phases of this assessment. This will include property ownership research, creation of the Quality Assurance Project Plan (QAPP)/Health & Safety Plan, site visits, radiological field survey, radon
- sampling and survey, map productions and attending technical meetings.
- 2. Radon Specialist to support the field aspect of the radiological assessment; specifically identifying the radon canister placement, placing the canisters, picking up the canisters and delivering to the laboratory for analysis.
- 3. Assist in a ground radiological survey (Support EPA with gamma radiological survey utilizing the Fluke Pressurized Ionization Chamber (Supplied by EPA) and the Ludlum 2241(Supplied by EPA).
- 4. Perform Rad7 survey (Radon/Thoron). Weston will need to obtain two Rad7 units.
- 5. Obtain radon charcoal canisters and transport to analytical laboratory. Exact amount of radon canisters will need to be determined after site visit.
- 6. Soil collection and laboratory analysis.
- 7. Maintain site log.
- 8. Photo-document site operations.
- 9. Prepare health and safety plan (Draft due 3 days after technical group meeting)
- 10. Complete the Removal Assessment at the Site by preparing requested deliverables, including maps, analytical data tables, and data validation and sampling reports, during and after completion of field work.

In accordance with B-9 Local Clause EPA-B-32-103, Contractor will notify the Contracting Officer, in writing, at least 5 days prior to the date when, in the Contractor's best judgment, the work will reach the point at which the total amount payable by the Government, including any cost for termination for convenience, will approximate 85% of the total amount currently allotted to the Task Order for performance of the applicable items.

I certify that this technical direction document does not request services that are inherently governmental functions and that it does not alter the contract or task order (1) statement of work, (2) level of effort, (3) cost of performing the authorized work, (4) number of deliverables, or (5) the due dates of deliverables.

## ANTHONY BROWN BROWN

Digitally signed by ANTHONY

Date: 2021.06.25 09:13:33 -04'00'

Anthony Brown Contracting Officer

Date